

## ABSTRACT

An amplifier circuit (1) includes an amplifying transistor (QØ) and an impedance-controllable dc bias circuit (2) for biasing the amplifier transistor (QØ) to obtain a  
5 conduction angle of at least about 180°. The dc bias circuit (2) includes a self-bias  
boosting circuit having separate current sources (Ibias, Iclass) for independently  
controlling the output impedance of the dc bias circuit (2) and the quiescent current of the  
amplifier transistor (QØ), and has a Wilson current-mirror (Q4, Q5, Q6, Q7) integrated  
with a cascode current-mirror circuit (Q2, Q3, Q8) to form an extended Wilson current-  
10 mirror circuit (Q2-Q8) having an output coupled to a control terminal of the amplifying  
transistor (QØ) by a resistor (R1), and a capacitor (C2) coupled from the extended Wilson  
current-mirror circuit (Q2-Q8) to a common terminal (Gnd).